PROPOSED CAAPP PERMIT
October 10, 2006

217/782-2113

RENEWAL
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

Rohm and Haas-Lansing Facility
Attn: Joy Warborg, Environmental Manager
2701 East 170th Street
Lansing, Illinois 60438

I.D. No.: 031159AAQ
Application No.: 96030188

Date Received: November 24, 2004
Date Issued: To Be Determined
Expiration Date[1]: To Be Determined

Operation of: Paint Manufacturing Operation
Source Location: 2701 and 3000 East 170th Street, Lansing, Cook County
Responsible Official: Jeffrey Jatis, Director of Operations, Automotive Coatings

This permit is hereby granted to the above-designated Permittee to OPERATE a paint manufacturing operation, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Dan Punzak at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:psj

cc: Illinois EPA, FOS, Region 1
CES
Lotus Notes

[1] Except as provided in Conditions 1.5 and 8.7 of this permit.

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1.0 INTRODUCTION

1.1 Source Identification

Rohm and Haas-Lansing Facility
2701 and 3000 East 170th Street
Lansing, Illinois 60438
708/474-7000

I.D. No.: 031159AAQ
County: Cook
Standard Industrial Classification: 2891, Paint Manufacturing

1.2 Owner/Parent Company

Rohm and Haas Company, through its wholly owned subsidiary Rohm and Haas Chemicals LLC, through its wholly owned subsidiary Bee Chemical Company
100 Independence Mall West
Philadelphia, Pennsylvania 19106

1.3 Operator

Bee Chemical Company, a wholly owned subsidiary of Rohm and Haas Chemicals LLC, which is a wholly owned subsidiary of Rohm and Haas Company
2701 East 170th Street
Lansing, Illinois 60438

Joy Warborg – Environmental Manager
708/868-7434

1.4 Source Description

Rohm and Haas-Lansing Facility is located at 2701 and 3000 East 170th Street, Lansing in Cook County. The source conducts operations for the manufacturing of paints for the automotive industry. Production is conducted on a batch basis. The materials used in the manufacturing of the paints generally include resin, organic solvent, and solid raw materials such as pigments. The operations at the plant are divided according to source categories and/or process operations. These operations are batchmaking, dispersion, resin manufacturing, storage tanks and solvent cleaning. Batchmaking is a process for the production of finished paint and intermediate coatings. Pigment dispersion involves the grinding (milling) of pigments from its aggregate state into dispersed particle sizes. The plant also manufactures its own resin, both for internal and external use.

Note: This narrative description is for informational purposes only and is not enforceable.

1.5 Title I Conditions

As generally identified below, this CAAPP permit contains certain conditions for emission units at this source that address the applicability of permitting programs for the construction and

modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include PSD and MSSCAM, and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of the Illinois Environmental Protection Act (Act). These conditions continue in effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

a. This permit contains Title I conditions that reflect Title I requirements established in permits previously issued for this source, which conditions are specifically designated as "T1."

2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BACT	Best Available Control Technology
BAT	Best Available Technology
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
ERMS	Emissions Reduction Market System
HAP	Hazardous Air Pollutant
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MSSCAM	Major Stationary Sources Construction and Modification (35 IAC 203, New Source Review for non-attainment areas)
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
$PM_{2.5}$	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
PSD	Prevention of Significant Deterioration (40 CFR 52.21, New Source Review for attainment areas)
RMP	Risk Management Plan
SO_2	Sulfur Dioxide
T1	Title I – identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New – identifies Title I conditions that are being established in this permit
T1R	Title I Revised – identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
TOC	Thermal Oxidizer Control (Device)
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material

3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Roll-On Gluing Operation for Labeling
Small Sampling Production Area
Circulation Lab
One 3.09 mmBtu/hr natural gas fired boiler
R3 Powder Conveying System
Two 4.75 mmBtu/hr natural gas fired heaters for TOC (used only briefly for startup)
Two (2) storage tanks for recirculating cooling water (STs 75 and 76)

3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

Four (4) bulk storage tanks (STs 20, 21, 24 and 27)

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Coating operations (excluding powder, architectural and industrial maintenance coating) with aggregate VOM usage that never exceeds 15 lbs/day from all coating lines at the source, including VOM from coating, dilutents, and cleaning materials [35 IAC 201.210(a)(13)].

Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b). Note: These activities are not required to be individually listed.

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.3.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322 (see Attachment 2) and 35 IAC Part 266. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit’s process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.2 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 218.301, which requires that organic material emissions not exceed 8.0 pounds per hour or, if no odor nuisance exists, do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.2.3 For each open burning activity, the Permittee shall comply with 35 IAC Part 237, including the requirement to obtain a permit for open burning in accordance with 35 IAC 237.201, if necessary.

3.2.4 For each storage tank that has a storage capacity greater than 946 liters (250 gallons) and, if no odor nuisance exists, that stores an organic material with a vapor pressure exceeding 2.5 psia at 70°F, the Permittee shall comply with the applicable requirements of 35 IAC 218.122, which requires use of a permanent submerged loading pipe, submerged fill, or a vapor recovery system.

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
Section 7.1			
Large Batchmaking Green Room East		Before 1970	Baghouse BH5
(3) 2000 gal mixing tanks	#11-13		
(7) 1000 gal mixing tanks	#14-20		
(3) 3000 gal mixing tanks - tanks for intermediate coatings	#41, 42, 43		
Green Room West		Before 1970	Baghouse BH1
(3) 4000 gal mixing tanks	#21-23		
(6) 2000 gal mixing tanks	#24-29		
(6) 500 gal mixing tanks	#31-36		
(1) 1600 gal mixing tank	#37		
(1) Solvent Manifold System		2001	None
Small Batchmaking			
(67) Mixers & associated portable pots Homogenizer mixer	#50-116	Before 1970 thru 2004	Baghouse BH3
Automatic Dispensing System		2000	None
Tote Tanks		2000	None
Filling Operation			
(9) Paint filling stations equipped with: air mixers and hydraulic mixers	#1-9	1986-1994	None
Water-Base Facility		Various between 1991-2000	
11 Stationary Process Tanks	1-11		Baghouse BH4
19 Floor Mixers	140-149; P70-P74; 301-304		Baghouse BH4
2 Storage Tanks	WB ST1, WB ST2	1996	None

Emission Unit	Description	Date Constructed	Emission Control Equipment
Section 7.2			
Dispersion Production			
Green Room East (8) Mills and Associated Mixing Tanks	#1-8	1993, 1999 (#2), 2006 (#4)	Baghouse BH2
Green Room West (8) Mills and Associated Mixing Tanks	#10-15, #25-26	1992, 1994 2000 (#10), 2006 (#25)	Baghouse BH2
(9) Mills and associated floor mixers and Portable Pots	#16 - #24	1992	Baghouse BH2
(1)High-Speed Disperser Turbomill	#9	1999	Baghouse BH2
Section 7.3			
Solvent Clean Up Operation:			Thermal Oxidizer (TOC)
Renzman Washing Machine	Bucketwasher	1986	
Bucketwasher Holding Tank	ST 79	1986	
Potwasher	Potwasher	1994	
Potwasher Holding Tank	ST 80	1994	
Walk-In Load Station		1994	
Paint Slop Collection Area		1994	
Solvent Still		1985	
Still Pre-Tank	ST 44a	1985	
Secondary Distillation System (Hydro-Tek)	Hydro-Tek	1988	

Emission Unit	Description	Date Constructed	Emission Control Equipment
Section 7.4			
Outdoor Tanks North Tank Farm 8 Bulk Storage Tanks	ST 1,4, 6, 16-17, 22, 26, 28	Before 1970	TOC
2 Bulk Storage Tanks	ST 51, 53	Before 1970	TOC
Northeast Tank Farm 5 Product Storage Tanks	ST 32, 33, 55, 56, 78	Before 1970 2005 (#32, 33)	TOC (#32 and 78 Only)
1 Product Storage Tank	ST 37	1996	None
South Tank Farm 3 Bulk Storage Tanks (Clean Up Solvent)	ST 42, 43, 44	Before 1970	TOC
1 Bulk Storage Tank	ST 47	Before 1970	TOC
Indoor Tanks V Room 6 Product Storage Tanks	ST 62, 63, 66, 67, 73, 74	Before 1970	None
3 Intermediate Storage Tanks	ST 70, 71, 72	Before 1970	None
Green Room East 5 Product Storage Tanks	ST 34, 35, 36, 58, 59	Before 1970	None
1 Cleaning Solvent Tank	ST 60	Before 1970	None
Green Room West 3 Product Storage Tanks	ST 29, 40, 41	Before 1970	None
Building 3 Still Bottom Waste Tank	ST 49	Before 1970	TOC
(2) 250 Gal Pre-Storage Secondary Distillation System Tanks	ST 77a, 77b	1998	TOC

Emission Unit	Description	Date Constructed	Emission Control Equipment
Section 7.5			
Acrylic Resin Production Resin Reactor Systems R-2	R-2, MT-2, IT-2, HT-2	1982	TOC
Acrylic Resin Production Resin Reactor Systems R-4	R-4, MT-4, IT-4, HT-4	1985	TOC
Acrylic Resin Production Resin Reactor Systems R-6	R-6, MT-6, IT-6, HT-6	1986	TOC
Polyester Resin Production Resin Reactor System R-3	R-3, HT-3, RT-3	1990	TOC, Powder Conveying Baghouse
Acrylic or Polyester Resin Production Resin Reactor System R-5	R-5, MT-5,IT-5,HT-5, RT-5	1992	TOC
Alar Filter Unit & Associated Tanks - Filter Tank, Receiver Tank, and Recirculation Tank	Alar Unit	1992	Baghouse (BH1)
Emulsifier System - Process and Feed Tanks	Emulsifier	1997	TOC
Section 7.6			
Workability Spray Booth Laboratory	Paint Spray Equipment for Testing of Paint Quality	2002	Dry Filters

5.0 OVERALL SOURCE CONDITIONS

5.1 Applicability of Clean Air Act Permit Program (CAAPP)

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of VOM emissions.

5.2 Area Designation

This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated nonattainment for the National Ambient Air Quality Standards for ozone and $PM_{2.5}$ and attainment or unclassifiable for all other criteria pollutants (NO_2, PM_{10}, SO_2, CO and lead).

5.3 Source-Wide Applicable Provisions and Regulations

5.3.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions for Specific Emission Units) of this permit.

5.3.2 In addition, emission units at this source are subject to the following regulations of general applicability:

a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

5.3.3 Fugitive Particulate Matter Operating Program

a. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)]. The Permittee shall comply with the fugitive particulate matter operating program, submitted to the Illinois EPA and incorporated by reference into this permit, and any amendments to the program submitted pursuant to paragraph b below.

b. The operating program shall be amended from time to time by the Permittee so that the operating program is current.

Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].

c. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

5.3.4 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.3.5 Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit the items below. This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(2)(i) and (ii).

a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or

b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

5.3.6 Future Emission Standards

a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the

applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (see Condition 9.12.2).

b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

5.3.7 Episode Action Plan

a. Pursuant to 35 IAC 244.141, 244.142, and 244.143, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144 and is incorporated by reference into this permit.

b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared by the Director of the Illinois EPA or his or her designated representative.

c. If an operational change occurs at the source which invalidates the plan, a revised plan shall be submitted to the Illinois EPA for review within 30 days of the change, pursuant to 35 IAC 244.143(d). Such plans shall be further revised if disapproved by the Illinois EPA.

d. Any subsequent revisions of the plan shall also be sent to the Cook County Department of Environmental Control.

5.4 Source-Wide Non-Applicability of Regulations of Concern

This source is not subject to 40 CFR Part 63, Subpart HHHHH for Miscellaneous Coating Manufacturing, Subpart DDDDD for Industrial Boilers, Subpart EEEE for Organic Liquids Distribution or Subpart FFFF for Miscellaneous Organic Chemical Manufacturing because the source is not a major source of HAPs. (See also Condition 5.6.2)

5.5 Source-Wide Control Requirements and Work Practices

Source-wide control requirements and work practices are not set for this source. However, there are requirements for unit specific control requirements and work practices set forth in Section 7 of this permit.

5.6 Source-Wide Production and Emission Limitations

5.6.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.6.1) are set for the purpose of establishing fees and are not federally enforceable (see Section 39.5(18) of the Act).

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	183.00
Sulfur Dioxide (SO_2)	0.03
Particulate Matter (PM)	1.73
Nitrogen Oxides (NO_x)	5.74
HAP, not included in VOM or PM	----
Total	190.50

5.6.2 Emissions of Hazardous Air Pollutants

Until December 1, 2006 the source may be operated as a major source of HAPs.

Pursuant to Section 39.5(7)(a) of the Act, after December 1, 2006 the emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined. This condition is being imposed so that the source is not a major source of HAP emissions. The Permittee shall fulfill the applicable testing, recordkeeping, and reporting requirements of Conditions 5.7.2, 5.9.2, and 5.10.2.

a. For the time period from December 1, 2006 through December 1, 2007, compliance with the annual HAP limits for the entire source shall be determined on a monthly basis, based on a cumulative total for the time period from December 1, 2006 to the present month.

b. Beginning on December 1, 2007, compliance with the annual HAP limits for the entire source shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

This limitation is for the purpose of avoiding applicability of the four NESHAPs listed in condition 5.4. If this source does not maintain its status as a minor source of HAPs, those NESHAPs will become applicable requirements as of the dates listed in the specified NESHAPs.

5.6.3 Other Source-Wide Production and Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to the federal rules for PSD, state rules for MSSCAM, or Section 502(b)(10) of the CAA. However, there are unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.7 Source-Wide Testing Requirements

5.7.1 Pursuant to 35 IAC 201.282 and Section 4(b) of the Act, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests [35 IAC 201.282(a)].

b. Testing by the Illinois EPA: The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary [35 IAC 201.282(b)].

c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

5.7.2 HAP Testing to Verify Minor Source Status

Pursuant to Condition 5.7.1 and to verify compliance with the requirements of Condition 5.6.2, that is that this source is not a major source of HAPs, the following testing requirements are established:

a. If in the previous calendar year, emissions of HAPs exceeded 80% of major source threshold for individual or total HAPs (greater than 8 tons of a single HAP or greater than 20 tons of total HAPs), then testing for HAPs shall be conducted as follows:

If the calculation uses an efficiency of greater than a 98% reduction in HAP emissions by the thermal oxidizer, then the oxidizer must be tested for control efficiency once every five year renewal period.

The determination of whether annual HAP emissions exceeded 80% of major source threshold shall be completed by March 1 of each year for the previous calendar year. The first determination shall be done by March 1, 2008 for calendar year 2007. If either of the 80% values is exceeded, or a thermal oxidizer efficiency of greater than 98% was used in the calculation, an emissions test shall be conducted to verify the 98% efficiency within 180 days. This efficiency determination need only be done once every five years unless the Illinois EPA makes a written request for a more frequent test.

This 180 day period for emissions destruction efficiency includes 30 days for review of the emissions test protocol. If the review extends beyond that time period, the field inspector or emissions test protocol reviewer may extend the 180 day period.

A standard emissions test for VOM destruction approved by the Illinois EPA may be used and the same destruction efficiency used for HAP destruction as was determined for VOM destruction.

5.8 Source-Wide Monitoring Requirements

Source-wide monitoring requirements are not set for this source. However, there are provisions for unit specific monitoring set forth in Section 7 of this permit.

5.9 Source-Wide Recordkeeping Requirements

5.9.1 Annual Emission Records

The Permittee shall maintain records of total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units)

of this permit to demonstrate compliance with Condition 5.6.1, pursuant to Section 39.5(7)(b) of the Act.

5.9.2 Records for HAP Emissions

The Permittee shall maintain records of HAP emissions on a rolling 12-month total basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit, pursuant to Section 39.5(7)(b) of the Act.

a. The Permittee shall maintain records of individual and combined HAP emissions on a monthly and rolling 12-month total basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.2, pursuant to Section 39.5(7)(b) of the Act.

b. If testing is required by Condition 5.7.2, the Permittee shall keep records of the testing, including the test date, conditions, methodologies, calculations, test results, and any discrepancies between the test results and formulation specifications of Condition 5.9.2(c) below.

5.9.3 Retention and Availability of Records

a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.10 Source-Wide Reporting Requirements

5.10.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the source with the permit requirements within 30 days, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. There are also reporting requirements for unit specific emission units set forth in Section 7 of this permit.

5.10.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information, including source-wide HAP emissions, for the previous calendar year.

5.10.3 Other Source-Wide Reporting Requirements

If the Permittee discovers that emissions of HAPs qualifies the source as a major source of HAPs, the Illinois EPA shall be notified within 5 working days of discovery.

5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios

Source-wide operational flexibility is not set for this source. However, there may be provisions for unit specific operational flexibility set forth in Section 7 of this permit.

5.12 Source-Wide Compliance Procedures

5.12.1 Procedures for Calculating Emissions

Except as provided in Condition 9.1.3, compliance with the source-wide emission limits specified in Condition 5.6 shall be addressed by the recordkeeping and reporting requirements of Conditions 5.9 and 5.10, and compliance procedures in Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit.

5.12.1 Other Source-Wide Compliance Procedures

N/A

6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

6.1 Emissions Reduction Market System (ERMS)

6.1.1 Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source shall have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 IAC 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 IAC 205.500 and 35 IAC 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 IAC 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 IAC 205.630).

6.1.2 Applicability

This source is considered a "participating source" for purposes of the ERMS, 35 IAC Part 205.

6.1.3 Obligation to Hold Allotment Trading Units (ATUs)

a. Pursuant to 35 IAC 205.150(c)(1) and 35 IAC 205.720, and as further addressed by Condition 6.1.8, as of December 31 of each year, this source shall hold ATUs in its account in an amount not less than the ATU equivalent of its VOM emissions during the preceding seasonal allotment period (May 1 - September 30), not including VOM emissions from the following, or the source shall be subject to "emissions excursion compensation," as described in Condition 6.1.5.

i. VOM emissions from insignificant emission units and activities as identified in Section 3 of this permit, in accordance with 35 IAC 205.220;

ii. Excess VOM emissions associated with startup, malfunction, or breakdown of an emission unit as authorized in Section 7.0 of this permit, in accordance with 35 IAC 205.225;

iii. Excess VOM emissions to the extent allowed by a Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3);

iv. Excess VOM emissions that are a consequence of an emergency as approved by the Illinois EPA, pursuant to 35 IAC 205.750; and

v. VOM emissions from certain new and modified emission units as addressed by Condition 6.1.8(b), if applicable, in accordance with 35 IAC 205.320(f).

b. Notwithstanding the above condition, in accordance with 35 IAC 205.150(c)(2), if a source commences operation of a major modification, pursuant to 35 IAC Part 203, the source shall hold ATUs in an amount not less than 1.3 times its seasonal VOM emissions attributable to such major modification during the seasonal allotment period, determined in accordance with the construction permit for such major modification or applicable provisions in Section 7.0 of this permit.

6.1.4 Market Transactions

a. The source shall apply to the Illinois EPA for and obtain authorization for a Transaction Account prior to conducting any market transactions, as specified at 35 IAC 205.610(a).

b. The Permittee shall promptly submit to the Illinois EPA any revisions to the information submitted for its Transaction Account, pursuant to 35 IAC 205.610(b).

c. The source shall have at least one account officer designated for its Transaction Account, pursuant to 35 IAC 205.620(a).

d. Any transfer of ATUs to or from the source from another source or general participant must be authorized by a qualified Account Officer designated by the source and approved by the Illinois EPA, in accordance with 35 IAC 205.620, and the transfer must be submitted to the Illinois EPA for entry into the Transaction Account database.

6.1.5 Emissions Excursion Compensation

Pursuant to 35 IAC 205.720, if the source fails to hold ATUs in accordance with Condition 6.1.3, it shall provide emissions excursion compensation in accordance with the following:

a. Upon receipt of an Excursion Compensation Notice issued by the Illinois EPA, the source shall purchase ATUs from the ACMA in the amount specified by the notice, as follows:

i. The purchase of ATUs shall be in an amount equivalent to 1.2 times the emissions excursion; or

ii. If the source had an emissions excursion for the seasonal allotment period immediately before the period for the present emissions excursion, the source shall purchase ATUs in an amount equivalent to 1.5 times the emissions excursion.

b. If requested in accordance with paragraph (c) below or in the event that the ACMA balance is not adequate to cover the total emissions excursion amount, the Illinois EPA will deduct ATUs equivalent to the specified amount or any remaining portion thereof from the ATUs to be issued to the source for the next seasonal allotment period.

c. Pursuant to 35 IAC 205.720(c), within 15 days after receipt of an Excursion Compensation Notice, the owner or operator may request that ATUs equivalent to the amount specified be deducted from the source's next seasonal allotment by the Illinois EPA, rather than purchased from the ACMA.

6.1.6 Quantification of Seasonal VOM Emissions

a. The methods and procedures specified in Sections 5 and 7 of this permit for determining VOM emissions and compliance with VOM emission limitations shall be used for determining seasonal VOM emissions for purposes of the ERMS, with the following exceptions [35 IAC 205.315(b)]:

No exceptions

b. The Permittee shall report emergency conditions at the source to the Illinois EPA, in accordance with 35 IAC 205.750, if the Permittee intends to deduct VOM emissions in excess of the technology-based emission rates normally achieved that are attributable to the emergency from the source's seasonal VOM emissions for purposes of the ERMS. These reports shall include the information specified by 35 IAC 205.750(a), and shall be submitted in accordance with the following:

i. An initial emergency conditions report within two days after the time when such excess emissions occurred due to the emergency; and

ii. A final emergency conditions report, if needed to supplement the initial report, within 10 days after the conclusion of the emergency.

6.1.7 Annual Account Reporting

a. For each year in which the source is operational, the Permittee shall submit, as a component of its Annual Emissions Report, seasonal VOM emissions information to the Illinois EPA for the seasonal allotment period. This report shall include the following information [35 IAC 205.300]:

i. Actual seasonal emissions of VOM from the source;

ii. A description of the methods and practices used to determine VOM emissions, as required by this permit, including any supporting documentation and calculations;

iii. A detailed description of any monitoring methods that differ from the methods specified in this permit, as provided in 35 IAC 205.337;

iv. If a source has experienced an emergency, as provided in 35 IAC 205.750, the report shall reference the associated emergency conditions report that has been approved by the Illinois EPA;

v. If a source's baseline emissions have been adjusted due to a Variance, Consent Order, or CAAPP permit Compliance Schedule, as provided for in 35 IAC 205.320(e)(3), the report shall provide documentation quantifying the excess VOM emissions during the season that were allowed by the Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3); and

vi. If a source is operating a new or modified emission unit for which three years of operational data is not

yet available, as specified in 35 IAC 205.320(f), the report shall specify seasonal VOM emissions attributable to the new emission unit or the modification of the emission unit.

b. This report shall be submitted by November 30 of each year, for the preceding seasonal allotment period.

6.1.8 Allotment of ATUs to the Source

a. i. The allotment of ATUs to this source is 210 ATUs per seasonal allotment period.

ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 23.765 tons per season.

iii. The source's allotment reflects 88% of the baseline emissions (12% reduction), except for the VOM emissions from specific emission units excluded from such reduction, pursuant to 35 IAC 205.405, including units complying with MACT or using BAT, as identified in Condition 6.1.10 of this permit.

iv. ATUs will be issued to the source's Transaction Account by the Illinois EPA annually. These ATUs will be valid for the seasonal allotment period following issuance and, if not retired in this season, the next seasonal allotment period.

b. Contingent Allotments for New or Modified Emission Units

None

c. Notwithstanding the above, part or all of the above ATUs will not be issued to the source in circumstances as set forth in 35 IAC Part 205, including:

i. Transfer of ATUs by the source to another participant or the ACMA, in accordance with 35 IAC 205.630;

ii. Deduction of ATUs as a consequence of emissions excursion compensation, in accordance with 35 IAC 205.720; and

iii. Transfer of ATUs to the ACMA, as a consequence of shutdown of the source, in accordance with 35 IAC 205.410.

6.1.9 Recordkeeping for ERMS

The Permittee shall maintain copies of the following documents as its Compliance Master File for purposes of the ERMS [35 IAC 205.700(a)]:

a. Seasonal component of the Annual Emissions Report;

b. Information on actual VOM emissions, as specified in detail in Sections 5 and 7 of this permit and Condition 6.1.6(a); and

c. Any transfer agreements for the purchase or sale of ATUs and other documentation associated with the transfer of ATUs.

6.1.10 Exclusions from Further Reductions

a. VOM emissions from the following emission units shall be excluded from the VOM emissions reductions requirements specified in 35 IAC 205.400(c) and (e) as long as such emission units continue to satisfy the following [35 IAC 205.405(a)]:

i. Emission units that comply with any NESHAP or MACT standard promulgated pursuant to the CAA;

ii. Direct combustion emission units designed and used for comfort heating purposes, fuel combustion emission units, and internal combustion engines; and

iii. An emission unit for which a LAER demonstration has been approved by the Illinois EPA on or after November 15, 1990.

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because they meet the criteria as indicated above [35 IAC 205.405(a) and (c)]:

None

b. VOM emissions from emission units using BAT for controlling VOM emissions shall not be subject to the VOM emissions reductions requirement specified in 35 IAC 205.400(c) or (e) as long as such emission unit continues to use such BAT [35 IAC 205.405(b)].

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because these emission units use BAT for controlling VOM emissions as indicated above [35 IAC 205.405(b) and (c)]:

None

7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

7.1 Coating Production – Batchmaking and Water-Base Operations

7.1.1 Description

The Permittee is a manufacturer of industrial coatings (paint). The coatings are produced on a batch basis (large batchmaking and small batchmaking). The batchmaking operation involves the production of finished and intermediate coatings based on the size of the batch. The large batchmaking is batch sizes ranging from approximately 500 to 4000 gallons while the small batchmaking is batch sizes ranging from approximately 10 to 500 gallons. Liquid solvents and resins plus solid materials are charged to the mixing tanks in an order specific to the formula for each batch. The batchmaking process involves steps of material charging, mixing and dispensing. The water-based paint manufacturing plant manufactures water-based coatings or paints for the automotive industry.

Note: This narrative description is for informational purposes only and is not enforceable.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Large Batchmaking Green Room East (3) 2000 gal mixing tanks (7) 1000 gal mixing tanks (3) 3000 gal mixing tanks - tanks for intermediate coatings	 #11-13 #14-20 #41, 42, 43	Before 1970	Baghouse BH5
Large Batchmaking (Cont.) Green Room West (3) 4000 gal mixing tanks (6) 2000 gal mixing tanks (6) 500 gal mixing tanks (1) 1600 gal mixing tank (1) Solvent Manifold System	 #21-23 #24-29 #31-36 #37	Before 1970 2001	Baghouse BH1 None

Emission Unit	Description	Date Constructed	Emission Control Equipment
Small Batchmaking			
(67) Mixers & associated portable pots Homogenizer mixer	#50-116	Before 1970 thru 2004	Baghouse BH3
Automatic Dispensing System		2000	
Tote Tanks		2000	
Filling Operation			
(9) Paint filling stations equipped with: air mixers and hydraulic mixers	#1-9	1986-1994	None
Water-Base Facility			
11 Stationary Process Tanks	1-11	Various between 1991-2000	Baghouse BH4
19 Floor Mixers	140-149; P70-P74; 301-304		Baghouse BH4
2 Storage Tanks	WB ST1, WB ST2	1996	None

7.1.3 Applicable Provisions and Regulations

a. The "affected mixers" for the purpose of these unit-specific conditions, are any of the mixers or mixing tanks described in Conditions 7.1.1 and 7.1.2.

b. The "affected filling stations" for the purpose of these unit-specific conditions, are any of the filling stations described in Conditions 7.1.1 and 7.1.2.

c. Each affected mixer constructed prior to April 14, 1972 at the source is subject to 35 IAC 212.322(a). The method for calculating allowable emissions pursuant to this rule is presented in Attachment 2 of this permit.

d. Each affected mixer dispensing system, and filling station at the source constructed on or after April 14, 1972 is subject to 35 IAC 212.321(a). The method for calculating

allowable emissions pursuant to this rule is presented in Attachment 2 of this permit.

e. Pursuant to 35 IAC 218.624, the Permittee shall not operate affected mixers with a volume of more than 45 liter (12 gal) for the production of paint unless:

   i. The mixer(s) are equipped with a cover which completely covers the mixer opening except for an opening no larger than necessary to allow for safe clearance for a mixer shaft. Such covers shall extend at least 1.27 cm (0.5 inch) beyond the outer rim of the opening or be attached to the rim.

   ii. The cover remains closed except when production, sampling, maintenance, or inspection procedures require access.

   iii. The cover is maintained in good condition such that, when in place, it maintains contact with the rim of the opening for at least 90 percent of the circumference of the rim.

f. The affected mixers, filling stations, and storage tanks, at the source are subject to 35 IAC 218.301 which requires that:

   No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit with the following exception: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall apply only to photochemically reactive material [35 IAC 218.301]. Note that the option for compliance by use of control equipment is not cited here since the units are not vented to a VOM control device.

g. The affected units are subject to the opacity requirements of Condition 5.3.2.

7.1.4 Non-Applicability of Regulations of Concern

a. The affected units vented to baghouses are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected units do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

b. The affected units that are not vented to a control device (baghouse or thermal oxidizer) are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected units do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.1.5 Control Requirements and Work Practices

At all times, the Permittee shall maintain and operate the coating production operation at the source including associated control devices, in a manner consistent with good air pollution control practice for minimizing emissions.

7.1.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected coating production operation is subject to the following:

a. The amount of coatings produced at the source shall not exceed the following limits:

	(gal/mo)	(gal/yr)
Large Batchmaking	590,000	5,900,000
Small Batchmaking	250,000	2,500,000

b. Emissions from the Water-Base Plant shall not exceed the following limits:

VOM Emissions	
(Tons/Month)	(Tons/Year)
0.62	6.15

These limits are based on throughput and emissions information supplied by the source.

The above limitations were established in Permits 90100097 and 96020036 with revisions as reflected in the original Title V permit, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. Specifically, the limits were reduced. [T1]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

c. Emissions and operation of the four Myers mixers in the water-base coating operation shall not exceed the following:

Combined 4 Mixer Capacity (Gallons/Batch)	Operation (Batches/Year)	VOM Emissions (Tons/Year)
840	257	0.58

The above limitations were established in Construction Permit 00070018, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. [T1]

d. Emissions from the solvent manifold are limited to negligible emissions. This limit is interpreted as 0.44 T/yr of VOM emissions.

The above limitation was established in construction permit 01080066 pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit do not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. [T1]

e. Emissions of VOM from the automated dispensing system and tote tanks shall not exceed the following limits:

	VOM Emissions (Tons/Mo)	(Tons/Yr)
Automated Dispensing System	1.0	10.0
Tote Tanks	0.1	1.0

These limits are based on throughput and emissions information supplied by the source.

The above limitations were established in Construction Permit 00100034, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. [T1]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

7.1.7 Inspection and Testing Requirements

a. Upon reasonable request by the Illinois EPA, the VOM emissions from the operation of the affected mixers (from representative mixers for typical production operation) shall be determined using engineering methods. VOM content of the material used in these operations may be determined using supplier data, formulation data, or using USEPA Reference Method 24 of 40 CFR 60 Appendix A.

b. The Permittee shall conduct a minimum of quarterly inspections of the covers on the mixers to determine if they comply with Condition 7.1.3(e) and complete repairs if necessary.

7.1.8 Monitoring Requirements

Manufacturer's recommended practices for bag replacement and maintenance of the baghouses shall be followed. Good engineering practice may be used if manufacturer's information is not available.

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for each affected coating production operation to demonstrate compliance with Condition 5.6.1, 7.1.3, 7.1.5, 7.1.6 and 7.1.8 pursuant to Section 39.5(7)(b) of the Act:

a. Coating production for large and small batchmaking in order to verify compliance with Condition 7.1.6(a).

b. Emission information sufficient to verify compliance with the individual limits in Conditions 7.1.6(b) through (e) such as batches per year and VOM emissions.

c. Records of calculations that show that if the VOM is photochemically reactive that emissions are less than 8 lb/hr in order to verify compliance with Condition 7.1.3(f).

d. Any other records required by or to verify compliance with 35 IAC 218.624 (Condition 7.1.3(e)). This is intended to include such items as dates of inspection and maintenance records for covers on the mixers, as appropriate.

e. A copy of Manufacturer's recommended practices for bag replacement and maintenance of the baghouses shall be kept on site. A copy of good engineering practice may be kept if manufacturer's information is not available.

7.1.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected coating production operation with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

i. Emissions of VOM from the affected units listed in Condition 7.1.6 in excess of the limits specified in Condition 7.1.6, within 30 days of such occurrence.

ii. Operation of the affected units in excess of the production limits specified in Condition 7.1.6 within 30 days of such occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected coating production operation without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Transfer a portion of solvent-based production into the water-based facility, provided the equipment continues to comply with the conditions of this permit.

7.1.12 Compliance Procedures

a. Emissions of VOM from the Large and Small Batchmaking (e.g., charging, dispensing, mixing/heating, and cleaning) are based on engineering methods based on fundamental vapor/liquid equilibrium relationships, such as Raoult's law and/or Dalton's law, and assuming ideal gas behavior. The emissions shall be generated for each production sequence and then assigned to either Large or Small Batchmaking production. Cleaning emissions shall be calculated using engineering estimates based on vapor displacement and heating equations. Alternative calculation methods can be used with agency approval.

b. Emissions of VOM from the Water-Based Facility operations are based on fundamental vapor/liquid equilibrium relationships, such as Raoult's law and/or Dalton's law, and assuming ideal gas behavior. Cleaning emissions shall be calculated using engineering estimates based on vapor displacement, heating equations, and mass balance estimates. Alternative calculation methods can be used with agency approval.

c. Emissions of PM before control shall be calculated using the AP-42 emission factor (Table 6.4-1) of 20 lb/ton of pigment. This low factor, in conjunction with Condition 7.1.5, assures compliance with Conditions 7.1.3(c) and (d).

d. Compliance with Condition 7.1.3(e)is addressed by the requirements of Condition 7.1.7(b) and the records required by Condition 7.1.9(d).

e. Compliance with Condition 7.1.3(f) is addressed by the records required in Condition 7.1.9(c).

f. Compliance with Condition 7.1.6 is addressed by the records required by Conditions 7.1.9(a) and (b).

7.2 Coating Production – Dispersion Operations

7.2.1 Description

The Permittee is a manufacturer of industrial coatings (paint). The coatings are produced on a batch basis Liquid solvents and resins plus solid materials are charged to the mixing tanks in an order specific to the formula for each batch. The dispersion production involves milling of pigment in a solvent and additives to achieve a desired mill consistency. Milling is conducted in closed-head mills. Each mill is associated with a pair of tanks (premix and catch) allowing multiple passes to achieve desired particle size consistency.

Note: This narrative description is for informational purposes only and is not enforceable.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Dispersion Production			
Green Room East (8) Mills and Associated Mixing Tanks	#1-8	1993, 1999 (#2), 2006 (#4)	Baghouse BH2
Green Room West (8) Mills and Associated Mixing Tanks	#10-15, #25-26	1992, 1994 2000 (#10), 2006 (#25)	Baghouse BH2
(9) Mills and associated floor mixers and Portable Pots	#16 - #24	1992	Baghouse BH2
(1)High-Speed Disperser Turbomill	#9	1999	Baghouse BH2

7.2.3 Applicable Provisions and Regulations

a. The "affected mixers" for the purpose of these unit-specific conditions, are any of the mixers or mixing tanks described in Conditions 7.2.1 and 7.2.2.

b. The "affected grinding mills" for the purpose of these unit-specific conditions, are any of the grinding mills described in Conditions 7.2.1 and 7.2.2.

c. Each affected grinding mill and mixer used in dispersion production is subject to 35 IAC 212.321(a). The method for calculating allowable emissions pursuant to this rule is presented in Attachment 2 of this permit.

d. Pursuant to 35 IAC 218.624, the Permittee shall not operate an affected open-top grinding mill and affected mixers with a volume of more than 45 liter (12 gal) for the production of paint unless:

   i. The mill(s) and mixer(s) are equipped with a cover which completely covers the mill or mixer opening except for an opening no larger than necessary to allow for safe clearance for a mixer shaft. Such covers shall extend at least 1.27 cm (0.5 inch) beyond the outer rim of the opening or be attached to the rim.

   ii. The cover remains closed except when production, sampling, maintenance, or inspection procedures require access.

   iii. The cover is maintained in good condition such that, when in place, it maintains contact with the rim of the opening for at least 90 percent of the circumference of the rim.

e. Pursuant to 35 IAC 218.625, the affected grinding mills shall comply with the following:

   i. The Permittee shall not operate a grinding mill for the production of paint which is not maintained in accordance with the manufacturer's specifications.

   ii. The Permittee shall not operate a grinding mill which is not equipped with fully enclosed screens.

   iii. The Permittee shall keep manufacturer's specifications for the grinding mills, and be made available upon request during business hours.

f. The affected mixers and grinding mills at the source are subject to 35 IAC 218.301 which requires that:

   No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit with the following exception: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall apply only to photochemically reactive material [35 IAC 218.301]. Note that the option for compliance by use of control equipment is not cited here since the units are not vented to a VOM control device.

g. The affected units are subject to the opacity requirements of Condition 5.3.2.

7.2.4 Non-Applicability of Regulations of Concern

a. The affected units vented to baghouses are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected units do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

b. The affected units that are not vented to either a control device (baghouse or thermal oxidizer) are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected units do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.2.5 Control Requirements and Work Practices

At all times, the Permittee shall maintain and operate the coating production operation at the source including associated control devices, in a manner consistent with good air pollution control practice for minimizing emissions.

7.2.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected coating production operation is subject to the following:

a. The amount of dispersion production at the source shall not exceed the following limits:

	(gal/mo)	(gal/yr)
Dispersion Production	160,000	1,600,000

b. Emissions of VOM from the 23 mills (#1, 3 thru #8 and #11 through #26) and their associated mixing tanks used in dispersion production shall not exceed the following limits:

Emission Unit	VOM Emissions (T/mo)	(T/yr)
All mill systems combined	1.3	12.5

The above limitations for all the mills were either established in the original Title V Permit or were revised in that permit from Construction Permit 05110010, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. [T1]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

c. Emissions from Dispersion Mills #2, #9 and #10 shall not exceed the following limits:

Emission Unit	VOM Emissions (Tons/Month)	(Tons/Year)	Construction Permit No.
Dispersion Mill #2	0.25	2.5	99060079
Dispersion Mill #10	0.10	0.5	00070019
High Speed Disperser (Mill #9)	0.02	0.13	99020072

These limits are based on throughput and emissions information supplied by the source.

The above limitations were established in the Construction Permits cited in the table, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permits does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. [T1]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

7.2.7 Inspection and Testing Requirements

a. Upon reasonable request by the Illinois EPA, the VOM emissions from the operation of the affected mixers and grinding mills (from representative mixer(s) and grinding mill(s) for typical production operation) shall be determined using engineering methods. VOM content of the material used in these operations may be determined using supplier data, formulation data, or using USEPA Reference Method 24 of 40 CFR 60 Appendix A.

b. The Permittee shall conduct a minimum of quarterly inspections of the covers on the mixers and grinders to determine if they comply with Condition 7.2.3(d) and (e) and complete repairs if necessary.

7.2.8 Monitoring Requirements

Manufacturer’s recommended practices for bag replacement and maintenance of the baghouses shall be followed. Good engineering practice may be used if manufacturer’s information is not available.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for each affected coating production operation to demonstrate compliance with Condition 5.6.1, 7.2.3, 7.2.5, 7.2.6 and 7.2.8 pursuant to Section 39.5(7)(b) of the Act:

a. An operating log for each mill which includes information on the production (gal/mo and gal/yr) in order to verify compliance with Condition 7.2.6(a).

b. Emission information sufficient to verify compliance with the individual limits in Conditions 7.2.6(b) and (c) such as VOM emissions.

c. Records of calculations that show that if the VOM is photochemically reactive that emissions are less than 8 lb/hr in order to verify compliance with Condition 7.2.3(f).

d. Any other records required by or to verify compliance with 35 IAC 218.624 and 218.625 (Conditions 7.2.3(d) and (e). This is intended to include such items as dates of inspection and maintenance records for covers and screens on the mixers and mills, as appropriate.

e. A copy of Manufacturer's recommended practices for bag replacement and maintenance of the baghouses shall be kept on site. A copy of good engineering practice may be kept if manufacturer's information is not available.

7.2.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected coating production operation with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

i. Emissions of VOM from the affected units listed in Condition 7.2.6 in excess of the limits specified in Condition 7.2.6, within 30 days of such occurrence.

ii. Operation of the affected units in excess of the production limits specified in Condition 7.2.6 within 30 days of such occurrence.

7.2.12 Compliance Procedures

a. Emissions of VOM from Dispersion Production (e.g., mixing/heating and cleaning) are based on engineering methods based on fundamental vapor/liquid equilibrium relationships, such as Raoult's law and/or Dalton's law, assuming ideal gas behavior, and accounting for batch recirculation. Cleaning emissions shall be calculated using engineering estimates based on vapor displacement and heating equations. Alternative calculation methods can be used with agency approval.

b. Emissions of PM before control shall be calculated using the AP-42 emission factor (Table 6.4-1) of 20 lb/ton of pigment. This low factor, in conjunction with Condition 7.2.5, assures compliance with Condition 7.2.3(c).

c. Compliance with Conditions 7.2.3(d) and (e) are addressed by the requirements of Condition 7.2.7(b) and the records required by Condition 7.2.9(d).

d. Compliance with Condition 7.2.3(f) is addressed by the records required in Condition 7.2.9(c).

e. Compliance with Condition 7.2.6 is addressed by the records required by Conditions 7.2.9(a) and (b).

7.3 Coating Production – Solvent Cleanup Operations

7.3.1 Description

The Permittee is a manufacturer of industrial coatings (paint). The coatings are produced on a batch basis when liquid solvents and resins plus solid materials are charged to the mixing tanks in an order specific to the formula for each batch. The batchmaking process involves steps of material charging, mixing and dispensing. The dispersion production involves milling of pigment in a solvent and additives to achieve a desired mill consistency.

Solvent cleanup operations are also performed. When done in large stationary vessels the vessels are closed. When small pieces of equipment are cleaned the operation is done in parts washers that are vented to a thermal oxidizer for control of VOM and HAP emissions. The distillation of contaminated solvent to regenerate clean solvent is also vented to the thermal oxidizer.

Note: This narrative description is for informational purposes only and is not enforceable.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Solvent Clean Up Operation:			Thermal Oxidizer (TOC)
Renzman Washing Machine	Bucketwasher	1986	
Bucketwasher Holding Tank	ST 79	1986	
Potwasher	Potwasher	1994	
Potwasher Holding Tank	ST 80	1994	
Walk-In Load Station		1994	
Paint Slop Collection Area		1994	
Solvent Still		1985	
Still Pre-Tank	ST 44a	1985	
Secondary Distillation System (Hydro-Tek)	Hydro-Tek	1988	

7.3.3 Applicable Provisions and Regulations

a. The "affected solvent cleanup operations/equipment" for the purpose of these unit-specific conditions, are any of the operations/equipment described in Conditions 7.3.1 and 7.3.2.

b. Pursuant to 35 IAC 218.630, the cleanup operation of the paint manufacturing equipment shall comply with the following:

   i. The Permittee shall not clean paint manufacturing equipment with organic solvent unless the equipment being cleaned is completely covered or enclosed except for an opening no larger than necessary to allow safe clearance for proper operation of the cleaning equipment, considering the method and materials being used.

   ii. The Permittee shall not store organic wash solvent in other than closed containers, unless closed containers are demonstrated to be a safety hazard, or dispose of organic wash solvent in a manner such that more than 20 percent by weight is allowed to evaporate into the atmosphere.

c. The affected solvent clean up operations at the source are subject to 35 IAC 218.301 which requires that:

   i. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in Condition 7.3.3(c)(ii) (see also 35 IAC 218.302) and the following exception: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall apply only to photochemically reactive material [35 IAC 218.301].

   ii. Emissions of organic material in excess of those permitted by Condition 7.3.3(c)(i) (see also 35 IAC 218.301) are allowable if such emissions are controlled by a thermal oxidizer that reduces at least 85 percent of the total uncontrolled organic material that would otherwise be emitted to the atmosphere [35 IAC 218.302(b)].

d. Malfunction and Breakdown Provisions

   Subject to the following terms and conditions, the Permittee is authorized to continue operation of the affected solvent cleanup operation units vented to the thermal oxidizer (TOC) (hereafter referred to as "the affected units" or "an affected unit" in these conditions related to malfunctions and breakdowns) in violation of the applicable standards in Condition 7.3.3 and 7.3.6 in the event of a malfunction or breakdown of the thermal oxidizer. This authorization is provided pursuant to 35 IAC 201.149, 201.161 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be

required to provide essential service or to prevent risk of injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

i. This authorization only allows such continued operation as necessary to provide essential service or prevent risk of injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.

ii. Upon occurrence of excess emissions due to malfunction or breakdown of the TOC, the Permittee shall as soon as practical follow the following operational requirements below:

A. Bucketwasher and potwasher systems will be shut down as soon as possible when the TOC is malfunctioning.

B. Distillation stills: the Hydro-Tek still will not be used except to finish a currently running batch; the Solvent Still will be stopped as soon as possible.

D. The above actions shall be described in writing or a computerized format for the operating personnel as Standard Operating Practices for malfunction of the TOC.

iii. The Permittee shall fulfill the applicable recordkeeping and reporting requirements of Conditions 7.3.9(e) and 7.3.10(b). For these purposes, operating time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected solvent cleaning production units out of service.

iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions lasting longer than 2 operating hours in duration or longer than 100 cumulative operating hours per calendar year, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.

v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

vi. Note that the emissions of HAPs during malfunction must be included in the determination of major or minor source HAP status. See Condition 5.6.2 and the records required by Condition 5.9.2.

7.3.4 Non-Applicability of Regulations of Concern

The affected units vented to the TOC are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected units do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.3.5 Control Requirements and Work Practices

At all times, the Permittee shall maintain and operate the solvent cleanup operation at the source including associated control devices, in a manner consistent with good air pollution control practice for minimizing emissions.

7.3.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected solvent cleanup operation is subject to the following:

a. Emissions from the Renzman Bucketwasher and Storage Tank ST-79 shall not exceed the following limits:

VOM Emissions	
(Tons/Month)	(Tons/Year)
0.92	9.2

These limits are based on throughput and emissions information supplied by the source.

The above limitations were established in Construction Permit 86120013, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed

in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

b. Emissions from the pot washer, walk-in load station, paint slop collection area, and Storage Tank ST-80 shall not exceed the following limits:

VOM Emissions	
(Tons/Month)	(Tons/Year)
0.6	5.85

These limits are based on throughput and emissions information supplied by the source.

The above limitations were established in Permit 93090022 with revisions as reflected in the original Title V permit, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. Specifically, the limits were reduced. [T1]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

c. Emissions from the Solvent Still and Storage Tank ST-44A are limited to negligible emissions. This limit is interpreted as a combined total of 0.44 T/yr of VOM emissions.

The above limitations was established in construction permit 85050035 with revisions as reflected in the original Title V permit, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. Specifically, the limits were reduced and – for the solvent recovery still - other emission, throughput, hours of operation, and types of solvent limitations were eliminated. [T1]

7.3.7 Testing Requirements

Upon reasonable request by the Illinois EPA, the VOM content of the cleanup solvents used may be determined using supplier data, formulation data or using USEPA Reference Method 24 of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a).

7.3.8 Monitoring Requirements

The Permittee shall monitor the oxidizer (TOC) bed temperature with a device, location and design recommended by the manufacturer.

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for each affected solvent cleanup operation to demonstrate compliance with Condition 5.6.1, 7.3.3, 7.3.5, 7.3.6 and 7.3.8 pursuant to Section 39.5(7)(b) of the Act:

a. The Permittee shall collect and record the following information related to the thermal oxidizer each day:

   i. TOC temperature monitoring data;

   ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission unit; and

   iii. A maintenance log for the capture system, control device, and monitoring equipment detailing all routine and non-routine maintenance performed including dates and durations of all outages.

   iv. It should be noted that the above records are not required by 35 IAC 218 Subpart AA for paint and ink manufacturing but since the TOC also controls equipment subject to 35 IAC Subpart RR (See Section 7.5), the TOC must comply with the above requirements specified in 35 IAC 218.991 (Subpart UU). The above requirements are reiterated in Condition 7.5.9.

b. Records that show that cleanup operations were conducted in covered equipment and that solvents are stored in closed containers as required by Condition 7.3.3(b).

c. Records of calculations that show that if the VOM is photochemically reactive that emissions are less than 8 lb/hr or are vented to the thermal oxidizer in order to verify compliance with Condition 7.3.3(c).

d. Emission information sufficient to verify compliance with the individual limits in Conditions 7.3.6(a) through (c).

e. Records for Malfunctions and Breakdowns

The Permittee shall maintain records, pursuant to 35 IAC 201.263, of continued operation of an affected unit subject to Condition 7.3.3(d) during malfunctions and breakdown of the TOC, which as a minimum, shall include:

i. Date and duration of malfunction or breakdown.

ii. A detailed explanation of the malfunction or breakdown.

iii. An explanation why the affected units continued to operate in accordance with Condition 7.3.3(d).

iv. The measures used to reduce the quantity of emissions and the duration of the event.

v. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.

vi. The amount of release above typical emissions during malfunction/breakdown.

7.3.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected solvent cleanup operation with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Emissions of VOM from the affected units listed in Condition 7.3.6 in excess of the limits specified in Condition 7.3.6, except as allowed per Condition 7.3.3(d), within 30 days of such occurrence.

b. Reporting of Malfunctions and Breakdowns

The Permittee shall provide the following notification and reports to the Illinois EPA, Air Compliance Unit and Regional Field Office, pursuant to 35 IAC 201.263, concerning continued operation of the affected units subject to Condition 7.3.3(d) during malfunction or breakdown of the TOC lasting longer than 2 operating hours in duration or longer than 100 cumulative operating hours per calendar year:

i. A. The Permittee shall notify the Illinois EPA's regional office by telephone as soon as

possible during normal working hours, but no later than three (3) days, upon the occurrence of noncompliance due to malfunction or breakdown pursuant to Condition 7.3.3(d) and lasting longer than 2 operating hours in duration or longer than 100 cumulative operating hours per calendar year.

B. Upon achievement of compliance, the Permittee shall give a written follow-up notice within 15 days to the Illinois EPA, Air Compliance Unit and Regional Field Office, providing a detailed explanation of the event, an explanation why continued operation of the affected unit vented to the thermal oxidizer was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected unit was taken out of service.

C. If compliance is not achieved within 5 working days of the occurrence, the Permittee shall submit interim status reports to the Illinois EPA, Air Compliance Unit and Regional Field Office, within 5 days of the occurrence and every 14 days thereafter, until compliance is achieved. These interim reports shall provide a brief explanation of the nature of the malfunction or breakdown, corrective actions accomplished to date, actions anticipated to occur with schedule, and the expected date on which repairs will be complete or the affected units will be taken out of service.

ii. In accordance with the due dates in Condition 8.6.1, the Permittee shall submit semi-annual malfunction and breakdown reports to the Illinois EPA pursuant to Sections 39.5(7)(a) and (f) of the Act. These reports may be submitted along with other semi-annual reports and shall include the following information for malfunctions and breakdowns of the TOC during the reporting period:

A. A listing of malfunctions and breakdowns in chronological order, that includes:

I. The date, time, and duration of each incident.

II. The identity of the affected operation(s) involved in the incident.

B. Dates of the notices and reports of Condition 7.3.10(b)(i).

C. Any supplemental information the Permittee wishes to provide to the notices and reports of Condition 7.3.10(b)(i).

D. The aggregate duration of all incidents during the six-month period.

E. If there have been no such incidents during the six-month period, this shall be stated in the report.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected solvent cleanup operation without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

a. Changes in the material stored in a tank, provided the tank continues to comply with the conditions of this permit.

b. Use of non-VOM containing cleaning solvents, such as acetone, in operating the bucketwasher and potwasher or for cleaning purposes in other equipment when needed, provided the equipment continues to comply with the conditions of this permit.

7.3.12 Compliance Procedures

a. Emissions of VOM from the Solvent Clean Up emission unit, shall be calculated based on emission factors on a per-batch basis derived from emission testing data on the actual process equipment or similar equipment. Actual emission estimates are based on the emissions being controlled by a thermal oxidizer achieving an overall reduction in uncontrolled VOM emissions of at least 95 percent based on manufacturer's information.

b. Compliance with Condition 7.3.3(b) is addressed by the records required in Condition 7.3.9(b).

c. Compliance with Condition 7.3.3(c) is addressed by the records required in Condition 7.3.9(c). For units vented to the thermal oxidizer, the monitoring requirements of Condition 7.3.8 and the records of Condition 7.3.9(a) also address compliance.

d. Compliance with Condition 7.3.3(d) is addressed by the records required in Condition 7.3.9(e) and the reporting requirements of Condition 7.3.10(b).

e. Compliance with Condition 7.3.6 is addressed by the records required by Condition 7.3.9(d).

7.4 Coating Production Support: Storage Tanks and Fugitive Components

7.4.1 Description

The Permittee is a manufacturer of industrial coatings (paint). The coatings are produced on a batch basis. Liquid solvents and resins plus solid materials are charged to the mixing tanks in an order specific to the formula for each batch. The batchmaking process involves material charging, mixing, milling of pigment, and dispensing.

Materials used in these operations are stored in above-ground storage tanks. Production equipment is connected with equipment components (pumps, valves, flanges, etc.).

Note: This narrative description is for informational purposes only and is not enforceable.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Outdoor Tanks			
North Tank Farm 8 Bulk Storage Tanks	ST 1,4, 6, 16-17, 22, 26, 28	Before 1970	TOC
2 Bulk Storage Tanks	ST 51, 53	Before 1970	TOC
Northeast Tank Farm 5 Product Storage Tanks	ST 32, 33, 55, 56, 78	Before 1970 2005 (#32, 33)	TOC (#32 and 78 Only)
1 Product Storage Tank	ST 37	1996	None
South Tank Farm 3 Bulk Storage Tanks (Clean Up Solvent)	ST 42, 43, 44	Before 1970	TOC
1 Bulk Storage Tank	ST 47	Before 1970	TOC
Indoor Tanks			
V Room 6 Product Storage Tanks	ST 62, 63, 66, 67, 73, 74,	Before 1970	None
3 Intermediate Storage Tanks	ST 70, 71, 72	Before 1970	None

Emission Unit	Description	Date Constructed	Emission Control Equipment
Indoor Tanks (Cont.) Green Room East 5 Product Storage Tanks	ST 34, 35, 36, 58, 59	Before 1970	None
1 Cleaning Solvent Tank	ST 60	Before 1970	None
Green Room West 3 Product Storage Tanks	ST 29, 40, 41	Before 1970	None
Indoor Tanks Building 3 Still Bottom Waste Tank	ST 49	Before 1970	TOC
(2) 250 Gal Pre-Storage Secondary Distillation System Tanks	ST 77a, 77b	1998	TOC

7.4.3 Applicable Provisions and Regulations

a. The "affected storage tanks" for the purpose of these unit-specific conditions, are any storage tanks described in Conditions 7.4.1 and 7.4.2.

b. Pursuant to 35 IAC 218.626, the storage tanks (even storage tanks considered to be insignificant based on their emissions) used in line with the paint production operation shall comply with the following:

   i. The Permittee shall equip tanks storing VOL with a vapor pressure greater than 10 kPa (1.5 psi) at 20°C (68°F) with pressure/vacuum conservation vents set as a minimum at +/- 0.2 kPa (0.029 psi). These controls shall be operated at all times. An alternate air pollution control system may be used if it results in a greater emission reduction than these controls. Tanks vented to the thermal oxidizer are considered acceptable under this alternate standard.

   ii. Stationary VOL storage containers with a capacity greater than 946 liter (250 gal) shall be equipped with a submerged-fill pipe or bottom fill. These controls shall be operated at all times.

c. For the affected storage tanks, the Permittee shall maintain readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel [35 IAC 218.129 (f)].

d. Pursuant to 35 IAC 218.628, the Permittee of a paint manufacturing source shall, for the purpose of detecting leaks, conduct an equipment monitoring program as set forth below:

i. Each pump shall be checked by visual inspection each calendar week for indications of leaks, that is, liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, the pump shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected.

ii. Any pump, valve, pressure relief valve, sampling connection, open-ended valve and flange or connector containing a fluid which is at least 10 percent VOM by weight which appears to be leaking on the basis of sight, smell, or sound shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected.

iii. A weather proof, readily visible tag, in bright colors such as red or yellow, bearing an identification number and the date on which the leak was detected shall be attached to leaking equipment. The tag may be removed upon repair, that is, when the equipment is adjusted or otherwise altered to allow operation without leaking.

iv. When a leak is detected, the Permittee shall record the date of detection and repair and the record shall be retained at the source for at least two years from the date of each detection or each repair attempt. The record shall be made available to any person upon verbal or written request during business hours.

e. The affected storage tanks at the source are subject to 35 IAC 218.301 which requires that:

i. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in Condition 7.4.3(e)(ii) (see also 35 IAC 218.302) and the following exception: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall apply only to photochemically reactive material [35 IAC 218.301].

ii. Emissions of organic material in excess of those permitted by Condition 7.4.3(e)(i) (see also 35 IAC 218.301) are allowable if such emissions are controlled by a thermal oxidizer that reduces at least 85 percent of the total uncontrolled organic

material that would otherwise be emitted to the atmosphere [35 IAC 218.302(b)].

f. It should be noted that the Permittee has requested to continue to operate equipment in other sections of this permit that are vented to the TOC control device (thermal oxidizer) in the event of malfunction or breakdown of the TOC in possible violation of an applicable rule. The request was not made for the tanks in this section. However, since the rules cited above [Conditions 7.4.3(b) through (e)] would not be violated, the tanks may continue to be operated during malfunction or breakdown of the TOC.

7.4.4 Non-Applicability of Regulations of Concern

a. The affected units vented to the TOC are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected units do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

b. The affected units that are not vented to the TOC are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected units do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.4.5 Control Requirements and Work Practices

At all times, the Permittee shall maintain and operate the coating production operation at the source including associated control devices, in a manner consistent with good air pollution control practice for minimizing emissions.

7.4.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected coating production operation is subject to the following:

Emissions from Storage Tanks ST-77A, 77B, and 78 are limited to negligible emissions. This limit is interpreted as a combined total of 0.44 T/yr of VOM emissions.

The above limitation was established in Permit 98070046 pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203.

7.4.8 Monitoring Requirements

a. The Permittee shall monitor the oxidizer (TOC) bed temperature with a device, location and design recommended by the manufacturer.

b. The Permittee shall conduct an equipment monitoring program for equipment used in the production of paints, as required by Condition 7.4.3(d).

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for each affected coating production operation to demonstrate compliance with Condition 5.6.1, 7.4.3, 7.4.5, 7.4.6 and 7.4.8 pursuant to Section 39.5(7)(b) of the Act:

a. The Permittee shall collect and record the following information related to the thermal oxidizer each day:

i. TOC temperature monitoring data;

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission unit; and

iii. A maintenance log for the capture system, control device, and monitoring equipment detailing all routine and non-routine maintenance performed including dates and durations of all outages.

iv. It should be noted that the above records are not required by 35 IAC 218 Subpart AA for paint and ink manufacturing but since the TOC also controls equipment subject to 35 IAC Subpart RR (See Section 7.5), the TOC must comply with the above requirements specified in 35 IAC 218.991 (Subpart UU). The above requirements are reiterated in Condition 7.5.9.

b. Emission information sufficient to verify compliance with the individual limits in Conditions 7.4.6.

c. Records showing that storage tanks containing a VOL with a vapor pressure greater than 10 kPa (1.5 psia) have either a conservation vent or are vented to the thermal oxidizer, that VOL storage tanks greater than 250 gallons have a submerged loading pipe and the dimensions and capacity of all affected storage tanks.

d. Records of pump inspections for leaks and timely repair of those leaks as required by Condition 7.4.3(d).

e. Records of calculations that show that if the VOM is photochemically reactive that emissions are less than 8 lb/hr or are vented to the thermal oxidizer in order to verify compliance with Condition 7.4.3(e).

7.4.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected coating production operation with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Emissions of VOM from the affected units listed in Condition 7.4.6 in excess of the limits specified in Condition 7.4.6, within 30 days of such occurrence.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected coating production operation without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Changes in the material stored in a tank, provided the tank continues to comply with the conditions of this permit.

7.4.12 Compliance Procedures

a. Emissions of VOM from the Bulk Storage Tanks shall be based on the current version of the TANKS program and any reductions by the thermal oxidizer for the tanks vented to it. Alternative calculation methods can be used with agency approval. Tank cleaning emissions shall be calculated using engineering estimates based on vapor displacement and heating equations.

b. Compliance with Conditions 7.4.3(b) and (c) are addressed by the records required in Condition 7.4.9(c).

c. Compliance with Condition 7.4.3(d) is addressed by the leak monitoring requirements of Condition 7.4.8(b) records required in Condition 7.4.9(d).

d. Compliance with Condition 7.4.3(e) is addressed by the records required in Condition 7.4.9(e). For units vented

to the thermal oxidizer, the monitoring requirements of Condition 7.4.8(a) also address compliance.

e. Compliance with Condition 7.4.6 is addressed by the records required by Condition 7.4.9(b).

7.5 Resin Production

7.5.1 Description

The reactor systems are used to manufacture acrylic resins and polyester resins. All reactors have condensers and their own holding tank. Each reactor is associated with an initiator tank and a monomer tank, except for reactor system (R3). The reactor, monomer, initiator and holding tanks are closed units with appropriate vents that discharge to condensers, scrubbers or receiving containers which ultimately are vented to the thermal oxidizer. Some vent lines which discharge into condensers have return lines where condensate is either collected in drums or returned into the reactors. Therefore, vapor emissions generated and released in the vent lines either condense out and are collected or returned to reactors, or exit as vapor controlled by the thermal oxidizer.

Note: This narrative description is for informational purposes only and is not enforceable.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Acrylic Resin Production Resin Reactor Systems R-2	R-2, MT-2, IT-2, HT-2	1982	Thermal oxidizer (TOC)
Acrylic Resin Production Resin Reactor Systems R-4	R-4, MT-4, IT-4, HT-4	1985	Thermal oxidizer (TOC)
Acrylic Resin Production Resin Reactor Systems R-6	R-6, MT-6, IT-6, HT-6	1986	Thermal oxidizer (TOC)
Polyester Resin Production Resin Reactor System R-3	R-3, HT-3, RT-3	1990	TOC Powder Conveying Baghouse
Acrylic or Polyester Resin Production Resin Reactor System R-5	R-5,MT-5,IT-5,HT-5, RT-5	1992	TOC

Emission Unit	Description	Date Constructed	Emission Control Equipment
Alar Filter Unit & Associated Tanks - Filter Tank, Receiver Tank, and Recirculation Tank	Alar Unit	1992	Baghouse (BH1)
Emulsifier System - Process and Feed Tanks	Emulsifier	1997	TOC

Note: Each resin reactor system has a reactor (R); reflux condenser; a holding tank (HT); and each system except #3 has a monomer tank (MT) and an initiator tank (IT). R3 and R5 also have Receiving Tanks (RT's) used to collect water by-product during reactions. HT3 is now used to store water by-product waste from Reactors 3 & 5.

7.5.3 Applicable Provisions and Regulations

a. An "affected reactor system" for the purpose of these unit-specific conditions, is any reactor and associated equipment used for the production of resins. The affected reactor systems are described in Conditions 7.5.1 and 7.5.2.

b. The "affected ALAR filter unit" for the purpose of these unit-specific conditions, is the ALAR filter unit described in Conditions 7.5.1 and 7.5.2.

c The "affected emulsifier system" for the purpose of these unit-specific conditions, is the emulsifier system described in Conditions 7.5.1 and 7.5.2.

d. The affected reactor systems, ALAR filter unit and emulsifier system are subject to 35 IAC 218 Subpart G, Use of Organic Material, which provides that:

i. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in Condition 7.5.3(d)(ii) (see also 35 IAC 218.302) and the following exception: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall apply only to photochemically reactive material [35 IAC 218.301].

ii. Emissions of organic material in excess of those permitted by Condition 7.5.3(d)(i) (see also 35 IAC 218.301) are allowable if such emissions are controlled by a thermal oxidizer that reduces at

least 85 percent of the total uncontrolled organic material that would otherwise be emitted to the atmosphere [35 IAC 218.302(b)].

e. The affected reactor systems are subject to 35 IAC 218 Subpart RR, Miscellaneous Organic Chemical Manufacturing Processes. Pursuant to 35 IAC 218.966(a), every owner or operator of a miscellaneous organic chemical manufacturing process emission unit subject to 35 IAC 218 Subpart RR shall employ emission capture and control techniques which achieve an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.

f. The affected reactor systems and ALAR filter unit are subject to 35 IAC 212.321. The method for determining the allowable emissions for this rule is described in Attachment 2.

g. The affected units are subject to the opacity requirements of Condition 5.3.2.

h. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of the affected reactor systems and emulsifier system in violation of the applicable standards in Condition 7.5.3(d) and (e) and Condition 7.5.6 in the event of a malfunction or breakdown of the thermal oxidizer (TOC). This authorization is provided pursuant to 35 IAC 201.149, 201.161 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent risk of injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

i. This authorization only allows such continued operation as necessary to provide essential service or prevent risk of injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.

ii. Upon occurrence of excess emissions due to malfunction or breakdown of the TOC, the Permittee shall take the following actions as soon as practical:

A. Cease loading and filling batches and do not start a batch when the thermal oxidizer is malfunctioning.

B. Batches in progress may continue to operate with the reflux condensers and/or with the reactors sealed.

C. Raw material additions to the emulsifier will cease as soon as possible when the TOC is malfunctioning. Material filling operations from the emulsifier will not occur.

D. The above actions shall be described in writing or a computerized format for the operating personnel as Standard Operating Practices for malfunction of the TOC.

iii. The Permittee shall fulfill the applicable recordkeeping and reporting requirements of Conditions 7.5.9(l) and 7.5.10(b). For these purposes, operating time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected reactor systems and emulsifier system out of service.

iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions lasting longer than 2 operating hours in duration or longer than 100 cumulative operating hours per calendar year, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.

v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

vi. Note that the emissions of HAPs during malfunction must be included in the determination of major or

minor source HAP status. See Condition 5.6.2 and the records required by Condition 5.9.2.

7.5.4 Non-Applicability of Regulations of Concern

a. The affected reactor systems are not subject to the NESHAP for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry, 40 CFR 63, Subpart F, because the source does not manufacture as a primary product one or more of the chemicals listed in table 1 of 40 CFR 63 Subpart F. In addition, the source is no longer a major source of HAPs.

b. The affected reactor systems are not subject to the requirements of 35 IAC 218 Subpart Q, Leaks from Synthetic Organic Chemical and Polymer Manufacturing Plants, pursuant to 35 IAC 218.421 because these components are not used to manufacture the synthetic organic chemicals or polymers listed in Appendix A of 35 IAC Part 218.

c. The affected reactor systems used in the manufacturing of polyester resin are not subject to the requirements of 35 IAC 218 Subpart CC, Polyester Resin Product Manufacturing Process, because these reactor systems are not polyester resin products manufacturing processes as that term is defined in 35 IAC 211.4850.

d. The affected reactor systems are not subject to the requirements of 35 IAC 218 Subpart V, Batch Operations, pursuant to 35 IAC 218.500 because this source does not have a standard industrial classification (SIC) code listed in 35 IAC 218.500(a)(1).

e. The affected units vented to baghouses or the TOC are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected units do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

f. The affected units that are not vented to either a baghouse or the TOC are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected units do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.5.5 Control Requirements and Work Practices

a. The thermal oxidizer shall be operated to reduce emissions of VOM by a minimum of 81 percent pursuant to 35 IAC 218 Subpart RR. See Condition 7.5.3(e). Note that a much higher emission reduction efficiency may be required in order for the source to maintain its status as a minor

source of HAPs and that Condition 7.5.3(d) requires 85% control if the organic material emissions prior to control are over 8 lb/hr and are photochemically reactive.

b. For any leaks from components subject to the control requirements of 35 IAC 218 Subpart RR, the owner or operator shall repair any component from which a leak of VOL can be observed. The repair shall be completed as soon as practicable but no later than 15 days after the leak is found, unless the leaking component cannot be repaired until the process unit is shut down, in which case the leaking component must be repaired before the unit is restarted [35 IAC 218.966(c)(1)].

c. The Permittee shall follow good operating practices for the condensers, including periodic inspection, routine maintenance and prompt repair of defects.

d. At all times, the Permittee shall maintain and operate the equipment at the source including associated control devices, in a manner consistent with good air pollution control practice for minimizing emissions.

7.5.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected reactor systems, ALAR filter unit and emulsifier system are subject to the following:

a. Emissions and operation of equipment shall not exceed the following limits:

Item of Equipment	Number of Batches (Batches/yr)	VOM Emissions (lb/mo)	(Ton/yr)
Reactor System (R-2)	600	126	0.63
Reactor System (R-4)	584	116	0.58
Reactor System (R-6)	963	238	1.19

These limits are based on throughput and emissions information supplied by the source.

The above limitations for the three reactor systems were revised from original Construction Permits 82020073, 86100061, and 99020072 in the original Title V Permit. These limits ensure that the construction and/or modification addressed in the aforementioned permits does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. Specifically, the limits were reorganized. [T1]

b. Emissions and operation of equipment shall not exceed the following limits:

Item of Equipment	Number of Batches (Batches/yr)	VOM Emissions (lb/mo)	VOM Emissions (Ton/yr)
Reactor System (R-3)	364	65	0.32

These limits are based on throughput and emissions information supplied by the source.

The above limitations for the R-3 reactor system were revised from Construction Permit 85050053 in the original Title V Permit. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. [T1]

c. Emissions and operation of equipment shall not exceed the following limits:

Item of Equipment	Number of Batches (Batches/yr)	VOM Emissions (lb/mo)	VOM Emissions (Ton/yr)
Reactor System (R-5)	427	64	0.32

These limits are based on throughput and emissions information supplied by the source.

The above limitations for the R-3 reactor system were revised from Construction Permit 90090032 in the original Title V Permit. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203.[T1]

d. Emissions from the ALAR filter unit and associated tanks shall not exceed the following limits:

Operation (Hours/Year)	VOM Emissions (Lbs/Hour)	VOM Emissions (Tons/Year)
847	7	2.97

These limits are based on throughput and emissions information supplied by the source.

The above limitations were established in Permit 92070049 as revised on September 20, 2002, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. [T1]

e. Emissions from the emulsifier are limited to negligible emissions. This limit is interpreted as 0.44 T/yr of VOM emissions.

The above limitation was established in Permit 96120075 pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. [T1]

7.5.7 Testing Requirements

Pursuant to 35 IAC 218.968(a), when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with Condition 7.5.3(e), the owner or operator of a VOM emission unit subject to the requirements of 35 IAC 218 Subpart RR shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in 35 IAC 218.105 and 218.112 as follows:

a. For control device efficiency testing and monitoring, the control device efficiency shall be determined by simultaneously measuring the inlet and outlet gas phase VOM concentrations and gas volumetric flow rates in accordance with the gas phase test methods specified in Condition 7.5.7(c) (see also 35 IAC 218.105(f)) [35 IAC 218.105(d)(1)].

b. The overall efficiency of the emission control system shall be determined as the product of the capture system efficiency and the control device efficiency or by the liquid/liquid test protocol as specified in 40 CFR 60.433 for each solvent recovery system. In those cases in which the overall efficiency is being determined for an entire line, the capture efficiency used to calculate the product of the capture and control efficiency is the total capture efficiency over the entire line [35 IAC 218.105(e)(1)].

c. Volatile Organic Material Gas Phase Source Test Methods: The methods in 40 CFR Part 60, Appendix A, delineated below shall be used to determine control device efficiencies:

i. 40 CFR Part 60, Appendix A, Method 18, 25 or 25A, as appropriate to the conditions at the site, shall be used to determine VOM concentration. Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. The test shall consist of three separate runs, each lasting a minimum of 60 min, unless the Illinois EPA and the USEPA determine that process variables dictate shorter sampling times [35 IAC 218.105(e)(1)].

ii. CFR Part 60, Appendix A, Method 1 or 1A, shall be used for sample and velocity traverses [35 IAC 218.105(e)(2)];

iii. CFR Part 60, Appendix A, Method 2, 2A, 2C or 2D, shall be used for velocity and volumetric flow rates [35 IAC 218.105(e)(3)];

iv. CFR Part 60, Appendix A, Method 3, shall be used for gas analysis [35 IAC 218.105(e)(4)];

v. CFR Part 60, Appendix A, Method 4, shall be used for stack gas moisture [35 IAC 218.105(e)(5)];

vi. CFR Part 60, Appendix A, Methods 2, 2A, 2C, 2D, 3 and 4, shall be performed, as applicable, at least twice during each test run [35 IAC 218.105(e)(6)]; and

vii. Use of an adaptation to any of the test methods specified in Conditions 7.5.7(c)(i), (ii) (iii), (iv), (v), and (vi) (see also 35 IAC 218.105(f)(1), (2), (3), (4), (5) and (6)) may not be used unless approved by the Illinois EPA and the USEPA on a case by case basis. An owner or operator must submit sufficient documentation for the Illinois EPA and the USEPA to find that the test methods specified in Conditions 7.5.7(c)(i), (ii) (iii), (iv), (v), and (vi) (see also 35 IAC 218.105(f)(1), (2), (3), (4), (5) and (6)) will yield inaccurate results and that the proposed adaptation is appropriate [35 IAC 218.105(e)(7)].

7.5.8 Monitoring Requirements

a. The Permittee shall monitor the oxidizer (TOC) bed temperature with a device, location and design recommend by the manufacturer.

b. Pursuant to 35 IAC 218.105(g), leak detection methods for volatile organic material owners or operators required by 35 IAC Part 218 to carry out a leak detection monitoring program shall comply with the following requirements:

i. Leak Detection Monitoring:

A. Monitoring shall comply with 40 CFR 60, Appendix A, Method 21 [35 IAC 218.105(g)(1)(A)];

B. The detection instrument shall meet the performance criteria of Method 21 [35 IAC 218.105(g)(1)(B)];

C. The instrument shall be calibrated before use on each day of its use by the methods specified in Method 21 [35 IAC 218.105(g)(1)(C)];

D. Calibration gases shall be:

1. Zero air (less than 10 ppm of hydrocarbon in air) [35 IAC 218.105(g)(1)(D)(i)]; and

2. A mixture of methane or n-hexane and air at a concentration of approximately, but no less than, 10,000 ppm methane or n-hexane [35 IAC 218.105(g)(1)(D)(ii)].

E. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 [35 IAC 218.105(g)(1)(E)].

ii. Pursuant to 35 IAC 218.105(g)(2), when equipment is tested for compliance with no detectable emissions as required, the test shall comply with the following requirements:

A. The requirements of Conditions 7.5.8(b)(i)(A) through (E) (see also 35 IAC 218.105(g)(1)(A) through (g)(1)(E)) of this Section above shall apply [35 IAC 218.105(g)(2)(A)]; and

B. The background level shall be determined as set forth in Method 21 [35 IAC 218.105(g)(2)(B)].

iii. Pursuant to 35 IAC 218.105(g)(3),leak detection tests shall be performed consistent with:

A. "APTI Course SI 417 controlling Volatile Organic Compound Emissions from Leaking Process Equipment", EPA-450/2-82-015 [35 IAC 218.105(g)(3)(A)];

B. "Portable Instrument User's Manual for Monitoring VOC Sources", EPA-340/1-86-015 [35 IAC 218.105(g)(3)(B)];

C. "Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOC and VHAP", EPA-450/3-88-010 [35 IAC 218.105(g)(3)(C)]; and/or

D. "Petroleum Refinery Enforcement Manual", EPA-340/1-80-008 [35 IAC 218.105(g)(3)(D)].

c. Manufacturer's recommended practices for bag replacement and maintenance of the baghouses shall be followed. Good engineering practice may be used if manufacturer's information is not available.

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected reactor systems, ALAR filter unit and emulsifier system to demonstrate compliance with Condition 5.6.1, 7.5.3, 7.5.5 and 7.5.6, pursuant to Section 39.5(7)(b) of the Act:

a. Records of the testing of the efficiency of each capture system and control device pursuant to Condition 7.5.7, which include the following [Section 39.5(7)(e) of the Act]:

i. The date, place and time of sampling or measurements;

ii. The date(s) analyses were performed;

iii. The company or entity that performed the analyses;

iv. The analytical techniques or methods used;

v. The results of such analyses; and

vi. The operating conditions as existing at the time of sampling or measurement.

b. Records of the leak detecting monitoring pursuant to Condition 7.5.8, which include the following [Section 39.5(7)(e) of the Act]:

i. The date, place and time of sampling or measurements;

ii. The date(s) analyses were performed;

iii. The company or entity that performed the analyses;

iv. The analytical techniques or methods used;

v. The results of such analyses; and

vi. The operating conditions as existing at the time of sampling or measurement.

c. Pursuant to 35 IAC 218.991(a)(2), any owner or operator of a VOM emission unit which is subject to the requirements of 35 IAC 218 Subpart RR and complying by the use of emission capture and control equipment shall collect and record all of the following information each day and maintain the information at the source for a period of three years:

i. TOC control device monitoring data [35 IAC 218.991(a)(2)(A)];

ii. A log of operating time for the capture system, TOC control device, monitoring equipment and the associated emission unit [35 IAC 218.991(a)(2)(B)]; and

iii. A maintenance log for the capture system, TOC control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages [35 IAC 218.991(a)(2)(C)].

iv. It should be noted that this recordkeeping for thermal oxidizer data also satisfies recordkeeping requirements for the emulsifier, which is controlled by the TOC but is not subject to 35 IAC 218 Subpart RR.

d. Pursuant to 35 IAC 218.966(c)(2), For any leak which cannot be readily repaired within one hour after detection, the following records shall be kept. These records shall be maintained by the owner or operator for a minimum of two years after the date on which they are made. Copies of the records shall be made available to the Illinois EPA or USEPA upon verbal or written request.

i. The name and identification of the leaking component [35 IAC 218.966(c)(2)(A)];

ii. The date and time the leak is detected [35 IAC 218.966(c)(2)(B)];

iii. The action taken to repair the leak [35 IAC 218.966(c)(2)(C)]; and

iv. The date and time the leak is repaired [35 IAC 218.966(c)(2)(D)].

e. Records addressing use of good operating practices for the thermal oxidizer:

i. Records for periodic inspection of the thermal oxidizer with date, individual performing the inspection, and nature of inspection; and

ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

f. Types and quantities of products produced for each affected reactor system, lb/batch, lb/mo, and ton/yr;

g. The number of batches begun in each affected reactor system; and

h. The aggregate monthly and annual VOM emissions from the affected reactor system based on the material and solvent usage and thermal oxidizer efficiency, with supporting calculations.

i. Name and identification of each cleanup solvent used.

j. Emission information sufficient to verify compliance with the individual limits in Conditions 7.5.6(a) through (e).

k. Records of calculations that show that if the VOM is photochemically reactive that emissions are less than 8 lb/hr or are vented to the thermal oxidizer in order to verify compliance with Condition 7.5.3(d).

l. Records for Malfunctions and Breakdowns

The Permittee shall maintain records, pursuant to 35 IAC 201.263, of continued operation of an affected reactor system and/or emulsifier system subject to Condition 7.5.3(h) during malfunctions and breakdown of the TOC, which as a minimum, shall include:

i. Date and duration of malfunction or breakdown.

ii. A detailed explanation of the malfunction or breakdown.

iii. An explanation why the affected reactor systems and/or emulsifier system continued to operate in accordance with Condition 7.5.3(h).

iv. The measures used to reduce the quantity of emissions and the duration of the event.

v. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.

vi. The amount of release above typical emissions during malfunction/breakdown.

m. A copy of Manufacturer’s recommended practices for bag replacement and maintenance of the baghouses shall be kept on site. GA copy of good engineering practice may be kept if manufacturer’s information is not available.

7.5.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected reactor systems, ALAR filter unit, or emulsifier system with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

i. Emissions of VOM from the affected units in excess of the limits specified in Condition 7.5.3 or 7.5.6, except as allowed per Condition 7.5.3(h), within 30 days of such occurrence.

ii. Operation of the affected units in excess of the production limits specified in Condition 7.5.6 within 30 days of such occurrence.

b. Reporting of Malfunctions and Breakdowns

The Permittee shall provide the following notification and reports to the Illinois EPA, Air Compliance Unit and Regional Field Office, pursuant to 35 IAC 201.263, concerning continued operation of the affected reactor systems and/or emulsifier system subject to Condition 7.5.3(e) during malfunction or breakdown of the TOC lasting longer than 2 operating hours in duration or longer than 100 cumulative operating hours per calendar year:

i. A. The Permittee shall notify the Illinois EPA's regional office by telephone as soon as possible during normal working hours, but no later than three (3) days, upon the occurrence of noncompliance due to malfunction or breakdown pursuant to Condition 7.5.3(h) and lasting longer than 2 operating hours in duration or longer than 100 cumulative operating hours per calendar year.

B. Upon achievement of compliance, the Permittee shall give a written follow-up notice within 15 days to the Illinois EPA, Air Compliance Unit and Regional Field Office, providing a detailed explanation of the event, an explanation why continued operation of the affected reactor systems and/or emulsifier system was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected

reactor systems and/or emulsifier system were taken out of service.

C. If compliance is not achieved within 5 working days of the occurrence, the Permittee shall submit interim status reports to the Illinois EPA, Air Compliance Unit and Regional Field Office, within 5 days of the occurrence and every 14 days thereafter, until compliance is achieved. These interim reports shall provide a brief explanation of the nature of the malfunction or breakdown, corrective actions accomplished to date, actions anticipated to occur with schedule, and the expected date on which repairs will be complete or the affected reactor systems and emulsifier system will be taken out of service.

ii. In accordance with the due dates in Condition 8.6.1, the Permittee shall submit semi-annual malfunction and breakdown reports to the Illinois EPA pursuant to Sections 39.5(7)(a) and (f) of the Act. These reports may be submitted along with other semi-annual reports and shall include the following information for malfunctions and breakdowns of the TOC during the reporting period:

A. A listing of malfunctions and breakdowns, in chronological order, that includes:

1. The date, time, and duration of each incident.

2. The identity of the affected operation(s) involved in the incident.

B. Dates of the notices and reports of Conditions 7.5.10(b)(i).

C. Any supplemental information the Permittee wishes to provide to the notices and reports of Conditions 7.5.10(b)(i).

D. The aggregate duration of all incidents during the six-month period .

E. If there have been no such incidents during the calendar six-month period , this shall be stated in the report.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected reactor systems, ALAR filter unit or emulsifier system. However, there

may be provisions for source-wide operational flexibility set forth in Condition 5.11 of this permit.

7.5.12 Compliance Procedures

a. Emissions of VOM from Resin Production (e.g., monomer and initiator preparation, charging, cooking, holding, filling, and cleaning) are based on engineering methods based on fundamental vapor/liquid equilibrium relationships, such as Raoult's law and/or Dalton's law, and assuming ideal gas behavior. Cooking emissions shall use USEPA-approved methodology to modify heating equations. Cleaning emissions shall be calculated using vapor displacement and heating equations based on the above engineering methods and engineering estimates. Actual emission estimates are based on the emissions being controlled by a thermal oxidizer achieving an overall reduction in VOM emissions of 95 percent based on manufacturer's information. Alternative calculation methods can be used with agency approval.

b. Compliance with Condition 7.5.3(h) is addressed by the records required in Condition 7.5.9(l) and the reporting requirements of Condition 7.5.10(b).

c. Compliance with Conditions 7.5.3(d) and (e) are addressed by the requirements of Condition 7.5.5(c) and (d), the testing requirements in Condition 7.5.7, the continuous monitoring requirements in Condition 7.5.8(a), and the records required in Conditions 7.5.9(a),(c), (e) and (k).

d. Compliance with Condition 7.5.3(f) is achieved by the minor amounts of solid material used and that amount is added indoors and with a baghouse to reduce employee discomfort.

e. Compliance with Condition 7.5.5(b) is addressed by the monitoring requirements of Condition 7.5.8(b) and the records required in Condition 7.5.9(d).

f. Compliance with the VOM emission limitations of Condition 7.5.6 is addressed by the records required in Condition 7.5.9(f), (g), (h) and (j).

7.6 Clean Room/Laboratory/Paint Spray Equipment

7.6.1 Description

The clean room is an area where coatings are tested by spraying onto a test product for quality testing purposes. The test products are not commercial materials intended for sale. It is referred to as a workability spray booth laboratory.

Note: This narrative description is for informational purposes only and is not enforceable.

7.6.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Workability Spray Booth Laboratory	Paint Spray Equipment for Testing of Paint Quality	2002	Dry Filters

7.6.3 Applicable Provisions and Regulations

a. The "affected spray booth laboratory" for the purpose of these unit-specific conditions, is a collection of equipment used for testing the workability of newly manufactured coatings and described in Conditions 7.6.1 and 7.6.2.

b. The affected spray booth laboratory and associated paint spraying equipment at the source are subject to 35 IAC 218.301 which requires that:

   No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit with the following exception: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall apply only to photochemically reactive material [35 IAC 218.301].

   Note that the option for compliance by use of control equipment is not cited here since the units are not vented to a VOM control device.

   Note that Condition 7.6.6 has a much stricter limit than 8 lb/hour.

c. The affected clean room/laboratory/paint spray systems are subject to 35 IAC 212.321. The method for determining the allowable emissions for this rule is described in Attachment 2.

7.6.4 Non-Applicability of Regulations of Concern

a. The affected spray booth laboratory is not subject to the New Source Performance Standards (NSPS) for Plastic Parts for Business Machines, 40 CFR Part 60, Subpart TTT, because the affected source does not manufacture or apply coatings to business machines.

b. The affected spray booth laboratory is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected spray booth laboratory does not use an add-on control device to achieve compliance with a VOM emission limitation or standard and does not have potential pre-control device emissions of PM that equal or exceed the major source threshold levels for PM, PM_{10} or $PM_{2.5}$.

7.6.5 Control Requirements and Work Practices

Control requirements and work practices are not set for the affected spray booth laboratory. Although there are filters, the low use of coatings assures compliance with any PM regulations.

7.6.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected spray booth laboratory is subject to the following:

a. The Permittee shall not use more than 2000 gallons of coating per year in the spray booth laboratory.

b. Volatile organic material (VOM) emissions from the spray booth laboratory shall not exceed 1.2 lb/hour and 5.0 tons/year.

c. Particulate matter (PM) emissions from the spray booth laboratory shall not exceed 0.3 lb/hour and 1.0 tons/year.

d. The above limitations were established in Permit 02110010, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. [T1]

7.6.7 Testing Requirements

Testing requirements are not set for the affected spray booth laboratory. However, there are general testing requirements in Condition 8.5.

7.6.8 Monitoring Requirements

Monitoring requirements are not set for the affected spray booth laboratory.

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected spray booth laboratory to demonstrate compliance with Condition 5.6.1 and 7.6.6, pursuant to Section 39.5(7)(b) of the Act:

a. Gallons of coating used per year;

b. Records sufficient to demonstrate compliance with the usage and emission limits in Condition 7.6.6; and

c. The annual VOM and PM emissions for the calendar year based on operating information, applicable factors, and formulas with supporting calculations.

7.6.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected spray booth laboratory with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Emissions of VOM or PM from the affected unit in excess of the limits specified in Condition 7.6.6 within 30 days of such occurrence.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected spray booth laboratory. However, there may be provisions for source-wide operational flexibility set forth in Condition 5.11 of this permit.

7.6.12 Compliance Procedures

Compliance with Condition 7.6.6 is addressed by the records required in Condition 7.6.9. The low VOM emissions rate of Condition 7.6.6(b) assure compliance with Conditions 7.6.3(b). The low PM emission rate required by Condition 7.3.6(c) assures that the PM allowable of 0.55 lb/hr for a process weight rate under 100 lb/hr could not be exceeded.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after _____Error! Bookmark not defined. (the date of issuance of the proposed permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

a. The changes do not violate applicable requirements;

b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test

methods), recordkeeping, reporting, or compliance certification requirements;

c. The changes do not constitute a modification under Title I of the CAA;

d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and

e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:

i. Describe the physical or operational change;

ii. Identify the schedule for implementing the physical or operational change;

iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;

iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA

every six months as follows, unless more frequent submittal of such reports is required in Sections 5 or 7 of this permit [Section 39.5(7)(f) of the Act]:

Monitoring Period	Report Due Date
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

a. The name and identification of the affected unit(s);

b. The person(s) who will be performing sampling and analysis and their experience with similar tests;

c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;

e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;

f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The

test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

a. The name and identification of the affected unit(s);

b. The date and time of the sampling or measurements;

c. The date any analyses were performed;

d. The name of the company that performed the tests and/or analyses;

e. The test and analytical methodologies used;

f. The results of the tests including raw data, and/or analyses including sample calculations;

g. The operating conditions at the time of the sampling or measurements; and

h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Unit with a copy sent to the Illinois EPA - Air Regional Field Office.

b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:

i. Illinois EPA - Air Compliance Unit

Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Quality Planning Section

Illinois Environmental Protection Agency
Bureau of Air
Air Quality Planning Section (MC 39)
P.O. Box 19276
Springfield, Illinois 62794-9276

iii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

iv. USEPA Region 5 - Air Branch

USEPA (AR - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the CAA (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a revision or combination of conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule.

9.1.2 In particular, this permit does not alter or affect the following [Section 39.5(7)(j)(iv) of the Act]:

a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and

d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Section 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Illinois Pollution Control Board regulations [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated there under.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents as may be required by law and in accordance with constitutional limitations, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Sections 4 and 39.5(7)(a) and (p)(ii) of the Act]:

a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment),

practices, or operations regulated or required under this permit;

d. Sample or monitor any substances or parameters at any location:

i. At reasonable times, for the purposes of assuring permit compliance or applicable requirements; or

ii. As otherwise authorized by the CAA, or the Act.

e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and

f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any regulated activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].

b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Air Quality Planning Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Unit, Air Regional Field Office, and USEPA Region 5 – Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

a. The certification shall include the identification of each term or condition of this permit that is the basis of the

certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.

c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act and applicable regulations [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as Attachment 1 to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence [Section 39.5(7)(k) of the Act]:

i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

ii. The permitted source was at the time being properly operated;

iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed

description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations [Section 39.5(7)(k)(iv) of the Act].

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit.

b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program.

c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statement were made in establishing the emission standards or limitations, or other terms or conditions of this permit.

d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5)(e) and (i) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of the permit, other portions of the permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit [Section 39.5(5)(l) and (o) of the Act].

Note: Pursuant to Sections 39.5(5)(h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal

application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7)(a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

Note: This condition is included in this permit pursuant to Section 39.5(7)(n) of the Act.

10.0 ATTACHMENTS

Attachment 1 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

Attachment 2 Emissions of Particulate Matter from Process Emission Units

a. New Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972 [35 IAC 212.321].

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.321(b)]:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

A. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.214	2.54
B	0.534	0.534

B. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	11.42	24.8
B	0.16	0.16

iii. Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 19, 1972 [35 IAC 212.321(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.1	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

iv. For process weight rates of less than 100 pounds per hour, the allowable emissions rate is 0.55 pounds per hour. (35 IAC 266.110)

b. Existing Process Emission Units for Which Construction or Modification Prior to April 14, 1972 [35 IAC 212.322].

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].

ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.322(b)]:

$$E = C + A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

A. Up to process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

B. For process weight rate in excess of 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	25.21	55.0
B	0.11	0.11
C	- 18.4	- 40.0

iii. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972 [35 IAC 212.322(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.2	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.0	8.7	10.00	19.20
13.0	11.1	15.00	25.20
18.0	13.8	20.00	30.50
23.0	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

iv. For process weight rates of less than 100 pounds per hour, the allowable emissions rate is 0.55 pounds per hour. (35 IAC 266.110)

Attachment 3 Compliance Assurance Monitoring (CAM) Plan

There are no specific emission units that require a CAM plan as identified in the Monitoring Requirements of Subsection 8 for each Section 7, Unit Specific Conditions for Specific Emission Units.

Attachment 4 Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, www.epa.state.il.us. This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance On Revising A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-revising.pdf

Guidance On Renewing A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-renewing.pdf

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

www.epa.state.il.us/air/caapp/index.html

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application For A Construction Permit form (199-CAAPP) and Fee Determination for Construction Permit Application form (197-FEE):

www.epa.state.il.us/air/caapp/199-caapp.pdf
www.epa.state.il.us/air/permits/197-fee.pdf

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